Work Order ID 86306

June-26-12 3:40:25 PM

86306

Item ID: D350-591-133 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Start Qty:** 4.00 6 *4* *6*
Required Date: 10/07/2012 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** MLJ **Date:** 12/06/26 **Tooling:** ______ **Date:** ______
QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D2946	Rev B

100
100
DC
Document Control

DOCUMENT CONTROL — 0.00

Memo — 0.00
Photocopy bluefile and type labels as per PPP D350-591-133 CHG003

DAS 16 12/07/13 JB — For MLJ 12-7-12

110
110
Large Fab
Large Fab

Large Fab — 0.00

Memo — 0.00
1-Cut D2622-120 extrusion to 62.06" long as per Dwg D2946

2-Deburr
Ensure that 57.09" minimum extrusion is kept and identify to be used for D350-591-215/-216.

Accept Qty: 6 Reject Qty: 0 Insp. Stamp: Ae 12.07.03

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________ **PAR #:** ______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ______________ **Disposition:** ______________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 86306 *86306*

June-26-12 3:40:25 PM

Item ID: D350-591-133 **Accept** *N900040100* **Setup Start** *NS1* **Stop** *NS2*

Revision ID:

Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Start Qty:** 4.00 16 *4*

Required Date: 10/07/2012 **Req'd Qty:** 4.00 *4*

Cust Item ID:

Customer:

Reference:

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Run Start *NR1* **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing **Memo**	0.00 0.00 517464				16	Ø		
130 *130* Large Fab Large Fab	Large Fab **Memo** 1-Deburr and Bevel ends for welding 2-Weld (1) End Cap and (2) Lugs using Jig DT8440 as per Dwg D2946 A/RAluminum Rod 120854 122130 3-Grind End Cap welds flush	0.00 0.00				16	Ø		12.07.04 12-07-04
140 *140* QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds **Memo**	0.00 0.00				6	Ø		12-07-05

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

Resolution: ____________________ Disposition: ____________________ QA: N/C Closed: _________ Date: _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86306
June-26-12 3:40:25 PM

86306

Item ID: D350-591-133 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID:
Item Name: Aft Maintenance Step **Stop** *NS2*
Start Date: 26/06/2012 **Start Qty:** 4.00 *4* **Cust Item ID:**
Required Date: 10/07/2012 **Req'd Qty:** 4.00 *4* **Customer:**
Reference:

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______ **Run Start** *NR1*
QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00 S12/05/06				6			
160 *160* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				6	MG	12-7-9	
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				6X	Ø		M-L 12/07/09

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** _______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** _________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 86306
June-26-12 3:40:25 PM

86306

Item ID:	D350-591-133	**Accept**	*N900040100*
Revision ID:		**Setup Start**	*NS1*
Item Name:	Aft Maintenance Step	**Stop**	*NS2*
Start Date:	26/06/2012	**Start Qty:** 4.00	*4*
Required Date:	10/07/2012	**Req'd Qty:** 4.00	*4*
Reference:		**Cust Item ID:**	
		Customer:	

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______ **Run Start** *NR1*

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* Large Fab Large Fab	Large Fab **Memo** Remove alodine prior to welding. Weld end cap as per Dwg D2946. Grind end cap weld flush. A/R AL ROD BATCH: 120854	0.00 0.00				6	0		K 12.07.09 Ae 12.07.10
190 *190* QC Quality Control	QC10- Inspect visual per QSI004- ground welds **Memo**	0.00 0.00 S 12/07/10							
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00 S 12/07/10				(+6)			

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W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________ **PAR #:** _______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ______________ **Disposition:** ______________ **QA: N/C Closed:** _________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86306
June-26-12 3:40:25 PM

86306

Item ID:	D350-591-133	**Accept**	*N900040100*	**Setup** **Start** *NS1*
Revision ID:				
Item Name:	Aft Maintenance Step			**Stop** *NS2*
Start Date:	26/06/2012	**Start Qty:** 4.00 *4*	**Cust Item ID:**	
Required Date:	10/07/2012	**Req'd Qty:** 4.00 *4*	**Customer:**	
Reference:				

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______ **Run** **Start** *NR1*

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 *210* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1	0.00				6			HG 12-7-11
	Memo	0.00							
220 *220* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00				6	X ∅		M-L 12/07/11
	Memo START TIME: 10:15 OVEN TEMPERATURE: 320°F FINISH TIME: 10:45	0.00							
230 *230* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch 122320	0.00				6	∅		12-7-11
	Memo	0.00							

W121481

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W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ________________ **PAR #:** _______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ________________ **Disposition:** ________________ **QA: N/C Closed:** _________ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86306

June-26-12 3:40:25 PM

86306

Item ID: D350-591-133 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID:

Item Name: Aft Maintenance Step **Stop** *NS2*

Start Date: 26/06/2012 **Start Qty:** 4.00 6 *4* **Cust Item ID:**

Required Date: 10/07/2012 **Req'd Qty:** 4.00 6 *4* **Customer:**

Reference:

Approvals: **Process Plan:** ________ **Date:** ______ **Tooling:** ______ **Date:** ______ **Run Start** *NR1*

QC: ________ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* QC Quality Control	QC3- Inspect Part Finish	0.00				6x	4	Ml	11/07/11
	Memo	0.00							
250 *250* Packaging Packaging	Pick Kit	0.00				6			12/07/13 JB
	Memo	0.00							
260 *260* QC Quality Control	QC4- 100% Inspect kits for completeness	0.00 DAS 16 12/07/13				6			
	Memo	0.00							

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W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ________________ **PAR #:** _______ **Fault Category:** ________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ________________ **Disposition:** ________________ **QA: N/C Closed:** _________ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86306

June-26-12 3:40:25 PM

86306

Item ID: D350-591-133

Accept *N900040100*

Setup Start *NS1*

Stop *NS2*

Revision ID:

Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Start Qty:** 4.00 *4*

Required Date: 10/07/2012 **Req'd Qty:** 4.00 *4*

Cust Item ID:

Customer:

Reference:

Approvals: **Process Plan:** ________ **Date:** ________ **Tooling:** ________ **Date:** ________

QC: ________ **Date:** ________ **SPC (Y/N):** ________ **Date:** ________

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 *270* Packaging Packaging	Packaging	0.00							
	Memo Identify and pack for shipping as per PPPD350-591-133 Location:________ PPP Rev:________	0.00							
280 *280* QC Quality Control	QC21- Final Inspection - Work Order Release	0.00				12/7/18			
	Memo	0.00							

MF
12-07-16

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

Resolution: ____________________ Disposition: ____________________ QA: N/C Closed: __________ Date: _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-26-12 3:40:29 PM

5

Work Order ID: 86306 *86306*

Parent Item: D350-591-133 *D350-591-133*

Parent Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Required Date:** 10/07/2012

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP Rev:B05.10.14Modified step 10KJ/EC
IPP Rev:B06.07.19D2946 @ rev.b EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C *D2622-120C* Step Extrusion		Manufactured	No			110	Each	148.6100	0.52 **	2.08		Ae 12.07-03	

Location	Loc Qty	Loc Code	
HALL	16.37		
46910	2		
64409	6		
66970	7.7		
68293	0.25		
72131	0.42		
WA	122.88		
81507	4.88		
83894	118		3.12
WA013	9.36		
75781	2		
77612	7.36		

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2734 *D2734* Step End Plate		Manufactured	No			130	Each	105.0000	2 **	8		12.07.04	

Location	Loc Qty	Loc Code	
WA	105		
80682	8		
83322	22		
84563	75		6+6

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ___________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Picklist Print

June-26-12 3:40:29 PM

Work Order ID: 86306 *86306*

Parent Item: D350-591-133 *D350-591-133*

Parent Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Required Date:** 10/07/2012

Start Qty: 4.00 **Required Qty:** 4.00

D2944 Manufactured No 130 Each 22.0000 2 8

D2944 **

Step Mounting Plate

Location		Loc Qty	Loc Code
WA		12	
	83845	12	12
WA018		10	
	73427	4	
	82109	6	

AN4-11A Purchased No 250 Each 264.0000 4 ~~16~~ 24 ✓

AN4-11A **

Bolt

Location		Loc Qty	Loc Code
ST356		264	
	118706	14	
	120731	100	
	121243	50	
	121708	100	121708

AN4-14A Purchased No 250 Each 616.0000 8 ~~32~~ 48 ✓

AN4-14A **

Bolt

Location		Loc Qty	Loc Code
357		81	
	121349	81	
ST357		535	
	120187	13	
	120769	1	
	121068	17	
	121708	4	
	122141	500	122141

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W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ PAR #: ______ Fault Category: ____________ NCR: Yes No DQA: _____ Date: ________

Resolution: ____________ Disposition: ____________ QA: N/C Closed: ________ Date: ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Picklist Print

June-26-12 3:40:30 PM

Work Order ID: 86306

Parent Item: D350-591-133

Parent Item Name: Aft Maintenance Step

86306
D350-591-133

Start Date: 26/06/2012 **Required Date:** 10/07/2012
Start Qty: 4.00 **Required Qty:** 4.00

AN4-16A | Purchased | No | 250 | Each | 167.0000 | 8 | ~~32~~ 48
AN4-16A
Bolt **
JB

Location		Loc Qty	Loc Code
ST358		167	
	120498	14	
	121060	28	
	121444	75	121444
	121541	50	

AN4-7A | Purchased | No | 250 | Each | 620.0000 | 2 | ~~8~~ 12
AN4-7A
Bolt **
JB

Location		Loc Qty	Loc Code
ST356		620	
	117514	20	
	120770	100	120770
	122141	500	

AN960JD416 | NAS1149D0463J | Purchased | No | 250 | Each | 31.0000 | 14 | ~~56~~ 84
AN960JD416
Washer ** 121912 JB

Location		Loc Qty	Loc Code
ST351		31	
	116289	10	
	119097	21	

D2230-1 | Manufactured | No | 250 | Each | 268.0000 | 4 | ~~16~~ 24
D2230-1
Lug **
JB 12/07/13

Location		Loc Qty	Loc Code
ST480		268	
	83273	28	
	84135	40	84135
	84136	200	

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-26-12 3:40:30 PM

Work Order ID: 86306 *86306*

Parent Item: D350-591-133 *D350-591-133*

Parent Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Required Date:** 10/07/2012

Start Qty: 4.00 **Required Qty:** 4.00

D2230-3
D2230-3
Lug

Manufactured	No	250	Each	186.0000	4 **	16 24	JB

Location		Loc Qty	Loc Code
ST480		186	
	83261	2	
	84133	184	84133

D2732
D2732
Rubber Extrusion

Manufactured	No	250	f	524.0000	2 **	8 12	JB 12/07/13

Location		Loc Qty	Loc Code
ST410		524	
	70987	28	
	83560	496	83560

cut (8) at 3.00"

D2856-400
D2856-400
Abrasion Strip

Manufactured	No	250	f	175.1425	1.26 **	5.04	JB 12/07/1?

Location		Loc Qty	Loc Code
ST403		165.698	
	81875	165.698	81875
ST409		9.4445	
	63735	0.6696	
	68076	0.3149	
	71164	8.46	

(2X) 4.00" X 7.20" per dwg

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

Resolution: ___________________ Disposition: ____________________ QA: N/C Closed: _________ Date: _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-26-12 3:40:30 PM

Work Order ID: 86306

86306

Parent Item: D350-591-133

D350-591-133

Parent Item Name: Aft Maintenance Step

Start Date: 26/06/2012 **Required Date:** 10/07/2012

Start Qty: ~~4.00~~ 6 **Required Qty:** 4.00

Item	Type		Qty	Unit	Qty		
D2945 *D2945* Step Mounting Plate	Manufactured	No	250	Each	16.0000	**	4 6 JB

Location		Loc Qty	Loc Code	
ST022		16		
	79056	6		1X79056
	83911	10		5X83911

Item	Type		Qty	Unit	Qty		
MS21042L4 *MS21042L4* Nut	Purchased	No	250	Each	2,026.000	14 **	~~56~~ 84 JB 12/07/11

Location		Loc Qty	Loc Code	
ST300		2026		
	119075	116		
	121011	193		
	121444	1417		121444
	121652	300		~~121656~~

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________ **PAR #:** ______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ______________ **Disposition:** ______________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

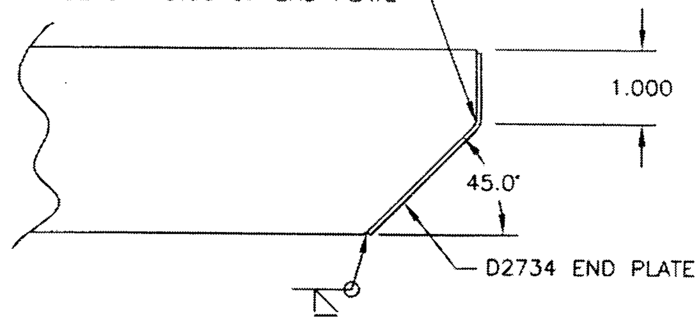
NOTE: Date & initial all entries

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D2946 STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY
D2946	Step Assembly	X
D2622-63	STEP EXTRUSION*	1
D2734	END PLATE	2
D2944	STEP MOUNTING PLATE	2

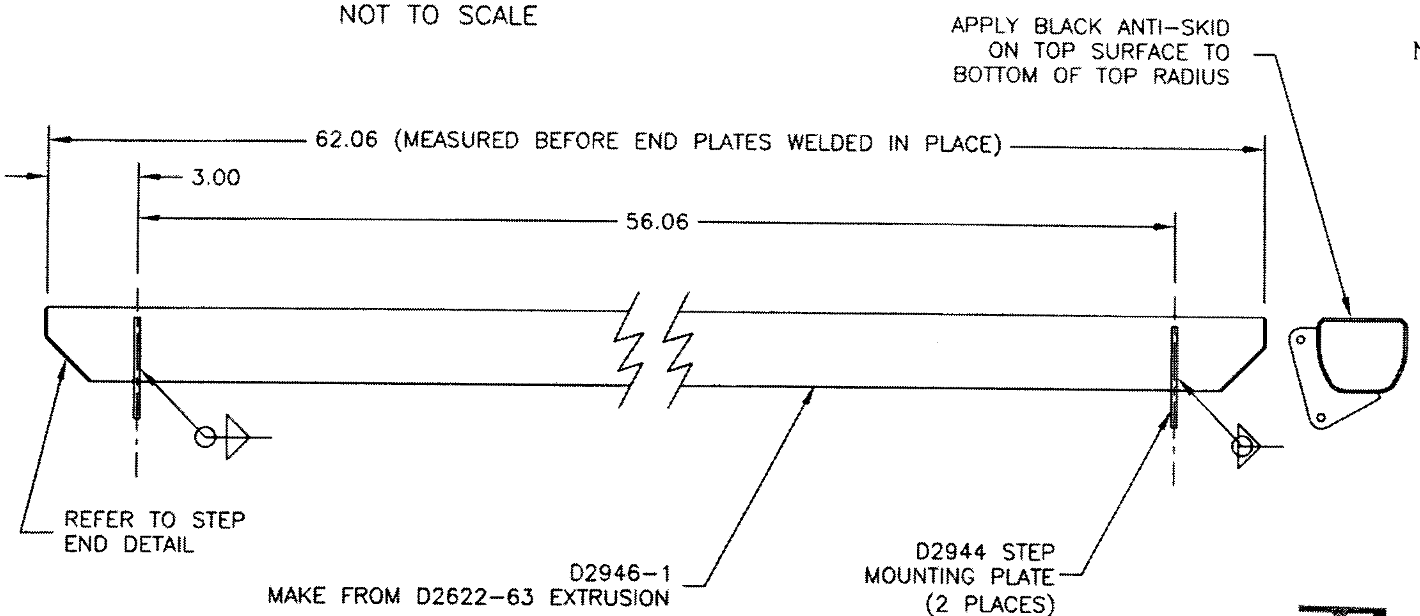
*cut per drawing



TYPICAL STEP END DETAIL
NOT TO SCALE

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004

SHOP COPY
RETURN TO ENGINEERING
UNCONTROLLED C
SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER
NO. 663066 MCJ 12/06/26



D2946-041 STEP ASSEMBLY

D2946 STEP ASSEMBLY
1) MAKE FROM D2622 STEP EXTRUSION
2) WELD PER DART QSI 004
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ENTIRE ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
4) ALL DIMENSIONS ARE IN INCHES
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED 05-11-28

REV	DATE	DESCRIPTION
A	99.12.13	NEW ISSUE
B	05.11.14	UPDATE FINISHING NOTE

DART

DESIGN: CP
DRAWN BY: PH
CHECKED: [illegible]
APPROVED: [illegible]
DATE: 05.11.14

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2946
TITLE: STEP ASSEMBLY
REV. B
SHEET 1 OF 1
SCALE 1:6

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: __________________ **PAR #:** _______ **Fault Category:** ________________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: __________________ **Disposition:** __________________ **QA: N/C Closed:** _________ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

5. PARTS LIST

Qty -111A	Qty -113	Qty -115	Qty -117A	Qty -119	Qty -133	Part Number	Description
X						D350-591-111A	***Heli-Access-Step*** ™, Long Step – High Skid
	X					D350-591-113	***Heli-Access-Step*** ™, Short Step – High Skid
		X				D350-591-115	***Heli-Access-Step*** ™, Short Step – Low Skid
			X			D350-591-117A	***Heli-Access-Step*** ™, Pre-Flight Step
				X		D350-591-119	***Heli-Access-Step*** ™, Long Step – Low Skid
					X	D350-591-133	***Heli-Access-Step*** ™, Aft Maintenance Step
	1					D2310	STEP ASSEMBLY (HIGH-SHORT)
1						D2311	STEP ASSEMBLY (HIGH-LONG)
		1				D2354	STEP ASSEMBLY (LOW-SHORT)
				1		D2355	STEP ASSEMBLY (LOW-LONG)
					1	D2946-041	STEP ASSEMBLY (MAINTENANCE)
4	2	2	2	2		D2171	CLAMP
4	2	2	2	2		D2182B035	CUSHION
					4	D2230-1	MOUNTING LUG
					4	D2230-3	MOUNTING LUG
8	4	4	4	4		D2274	RADIUS BLOCK
			1			D2362-041	SUPPORT BRACKET
2	1			1		D2362-3	SUPPORT BRACKET
		1				D2362-5	SUPPORT BRACKET
2	1	1	1	1	2	D2856-400-720	ABRASION STRIP
					1	D2945	MOUNTING PLATE
2	2	2		2		AN3-37A	BOLT
					2	AN4-7A	BOLT
					4	AN4-11A	BOLT
					8	AN4-14A	BOLT
		4				AN4-16A	BOLT
8	4			4		AN4-20A	BOLT
1	1	1	4	1		AN4-22A	BOLT
4	4	4		4		AN960JD10	WASHER
10	6	2	4	6	14	AN960JD416	WASHER
		4				AN960JD416L	WASHER
2	2	2		2		MS21042L3	NUT
9	5	5	4	5	14	MS21042L4	NUT

Qty -121	Qty -122	Qty -123	Qty -124	Part Number	Description
X				D350-591-121	***Heli-Access-Step*** ™, Short Step – High Skid, LH
	X			D350-591-122	***Heli-Access-Step*** ™, Short Step – High Skid, RH
		X		D350-591-123	***Heli-Access-Step*** ™, Short Step – Low Skid, LH
			X	D350-591-124	***Heli-Access-Step*** ™, Short Step – Low Skid, RH
1				D2351-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1			D2351-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1		D2356-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1	D2356-042	STEP ASSEMBLY (LOW-SHORT, RH)
1	1	1	1	D2230-1	MOUNTING LUG
1	1	1	1	D2230-3	MOUNTING LUG
1	1	1	1	D2856-400-720	ABRASION STRIP
2	2	2	2	AN3-37A	BOLT
3	3	3	3	AN4-13A	BOLT
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD416	WASHER
2	2	2	2	MS21042L3	NUT
3	3	3	3	MS21042L4	NUT

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6
REF FAA STC: SH967NE

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -121	Qty -122	Qty -123	Qty -124	Qty -133	Part Number	Description
X					D350-591-121	***Heli-Access-Step*** ™, Short Step – High Skid, LH
	X				D350-591-122	***Heli-Access-Step*** ™, Short Step – High Skid, RH
		X			D350-591-123	***Heli-Access-Step*** ™, Short Step – Low Skid, LH
			X		D350-591-124	***Heli-Access-Step*** ™, Short Step – Low Skid, RH
				X	D350-591-133	***Heli-Access-Step*** ™, Aft Maintenance Step
2	2	2	2	8	D2732-030	CUSHION
2	2	2	2	8	AN4-16A	BOLT

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.

Qty -011	Qty -013	Part Number	Description
X		DSI-9459-011	Rubber Cushion Kit (for -121/-122/-123/-124 steps)
	X	DSI-9459-013	Rubber Cushion Kit (for -133 steps)
2	8	D2732-030	CUSHION
2	8	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION BRANCH
DAO # 01-O-01
APPROVED
BY: [signature]
D. SHEPHERD (DE # 02)
DATE: 09.06.24
CERT. NO.: SH92-6
ISSUE NO.: 11

REV.	DESCRIPTION	BY	DATE
B	AN4-16A WAS -17A FOR -013/-133 KIT	CP	09.06.24
A	NEW ISSUE	CP	09.04.17

DESIGN	[initials]	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	[initials]	
CHECKED	[initials]	DRAWING NO. DSI 9459 — REV. B — SHEET 1 OF 2
MFG. APPR.	N/A	
APPROVED	[initials]	TITLE: OPTIONAL CLAMP MODIFICATIONS — SCALE: NTS
DE APPR.	[initials]	
DATE	09.06.24	